

-2-

Amendment to the Specification

Please replace the paragraph beginning on page line with the following rewritten paragraph:

-- Referring to Fig. 1 in a first embodiment, an image display system ~~40~~² **10** includes an adjustable rest such as a chair **12**, an image projector **14**, an eye position detector including cameras **16** provided with light sources **19** for emitting non-visible radiation such as infrared radiation, and a controller **18**. An example of an eye position detector suitable for use with the present invention is shown aforementioned European patent EP 0 350 957 A3. Components of the image projector **14** can be mounted to enable X-Y translation of the exit pupils for example on translation stages **11** and **13**, respectively. Alternatively, an adjustable optical element or elements, such as a moveable mirror or lens can be employed to adjust the position of the image formed by the display system. The chair **12** is moveable for example in the X-Y and Z directions by a servo-mechanism **17** mechanically connected to the chair **12** and controlled by the controller **18**. The servo-mechanism **17** may also be capable of rotating the chair about one or more axes such as the horizontal and vertical axes. Alternatively, the chair may be moveable with six degrees of freedom. In operation, the controller **18** first sets the position of the exit pupils by adjusting the image projector components to a nominal position that maximizes the image projector's range of adjustment. The eye position detector **16** located in front of a viewer **20** detects the position of the viewer's eyes. The eye position detector includes an image processor for detecting the location of the viewer's eyes within the image(s) produced by camera(s) **16** and generates eye-position information. This eye-position information is sent to the controller **18** and is compared to the exit pupil location provided by the image projector **14**. If the positions are different, the controller **18** will adjust the position of either the projected image or the adjustable chair **12** to align the viewer's eyes with the predetermined image location. The adjustable rest **12** may include a head-rest **23** for positioning the viewer's head with respect to the projected image. Small, quick movements of the viewer's eyes are accommodated

-3-

by adjusting elements of the image projector to align the exit pupil(s) with the viewer's eye(s). Large, slow movements of the viewer's eyes are accommodated by moving the adjustable rest to relocate the viewer's eyes in the nominal position.